Tobacco State

A special publication from the Missouri Department of Health and Senior Services,
Division of Chronic Disease Prevention and Health Promotion,
(573) 522-2800

A Closer Look at Tobacco Use in Missouri

The Cost of Tobacco in Missouri—in Real Terms

Each year the death toll from tobacco use in Missouri is higher than car crashes, AIDS, illegal drugs, suicides, fires and homicides combined.[1] The tobacco death toll in Missouri is 10,000 per year. That's 28 Missouri deaths per day; it's about one Missourian every hour dying from tobacco use. Others become ill, disabled or die from accompanying tobacco-related causes, such as from secondhand smoke (e.g., lung cancer, heart disease, asthma, etc.), spit tobacco use and injuries from fires. Overall, it is estimated that one in two people eventually die from persistent cigarette smoking.

The resulting health care, disability, lost productivity and revenue costs are large—$206 million in Medicaid costs, and $1.5 billion in total medical costs.[1,2,3,4] When the effects of tobacco use are considered, the consequences to Missouri are staggering.

Heart disease, cancer, stroke and chronic lower respiratory diseases are the four leading causes of death in Missouri. Those diseases accounted for 36,166 of the state's total number (54,602) of deaths in the year 2000.[5] Missouri's high smoking rates contribute to the state's ranking well above the United States average for these leading causes of death. Lung cancer is another long-term effect from smoking. Middle age smokers in the United States are 20 times more likely to die of lung cancer than non-smokers.[6] Research shows that the amount of time a person has smoked has more to do with the development of cancer than does the number of cigarettes smoked daily. Therefore, those who start to smoke in their teens and continue smoking are at greater risk.

Smokers affect not only their own health, but also the health of those around them. Secondhand smoke contains more than 4,000 substances of which more than 40 are known to cause cancer. Each year environmental tobacco smoke kills approximately 53,000 Americans.[7]

Smoking also causes death and disease during pregnancy. Smoking while pregnant doubles the risk of having a low birth weight baby. In addition, smoking increases the risk of miscarriage and places greater risk on the baby than cocaine.[8] Yet, in spite of these known health consequences, almost one in five (18.3%) pregnant women in Missouri report smoking during pregnancy.[9]

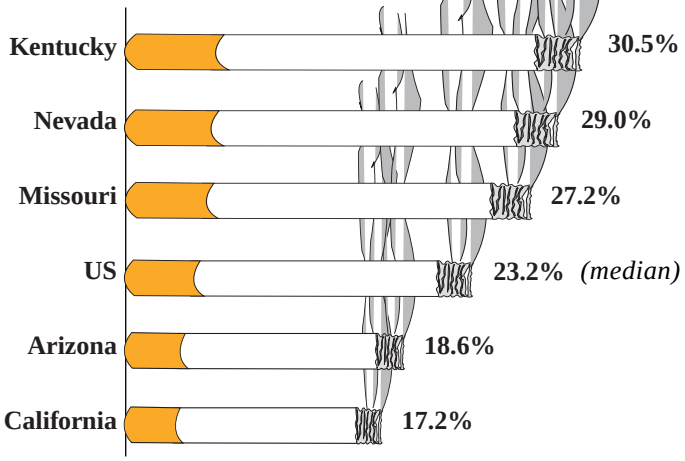


Figure 1—Percentage of Adults Who Currently Smoke, by state

Missourians smoke at a rate that is higher than the national average.

Source: Behavioral Risk Factor Surveillance System—2000. Centers for Disease Control and Prevention.

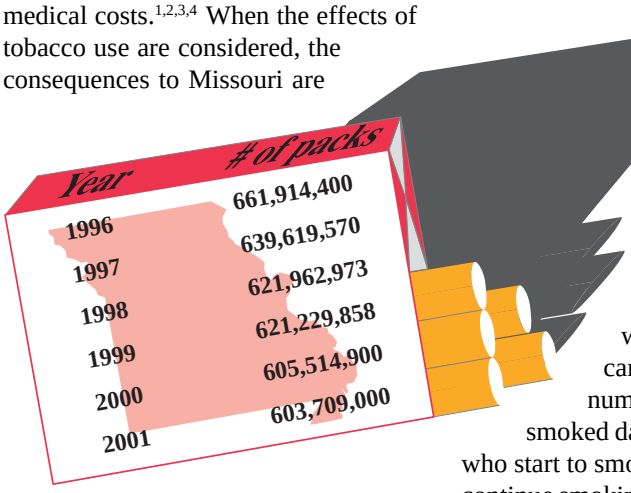


Figure 2—Annual pack sales in Missouri

Source: Missouri Department of Revenue, 2002

The Bottom Line is Saving Lives

When the value of each service for the U.S. population is evaluated based on disease prevented and cost effectiveness, the resulting measure is called "quality-adjusted life years" (QALYs). The QALY of assessing adults for tobacco use and providing tobacco cessation counseling ranks second only to childhood immunization for health benefits and cost effectiveness.[10] Yet, fewer than half (44%) of Missouri's adult current smokers reported that a doctor or other health professional advised them to quit smoking in the past 12 months.[11] It is estimated that if counseling were delivered to all smokers on a regular basis, approximately 70,000 U.S. deaths could be prevented in one year and more than 500,000 QALYs saved.[10, 12]

Providing anti-tobacco messages to youth also has a very high QALY ranking. In fact, healthcare cost saving begins when only one-third of 1% of adolescents comply with clinician advice not to begin smoking or to quit smoking.

Smoking cessation interventions for pregnant women are especially cost-effective because they result in fewer low birth weight babies, decreased perinatal deaths and fewer physical and behavioral problems during infancy and childhood.

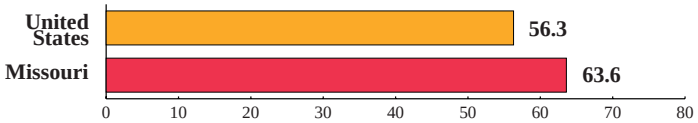


Figure 3—Lung Cancer Death Rate, 2000

Sources: (MO) Center for Health Information, Management and Evaluation
(US) U.S. Centers for Disease Control and Prevention
rates are per 100,000 and age-adjusted to 2000 U.S. population

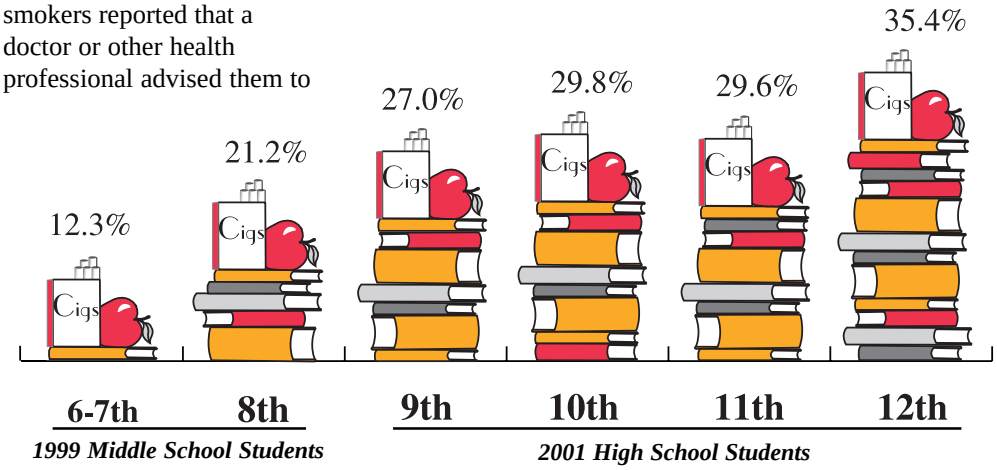


Figure 4—Current Missouri Student Smokers, by Grade

Sources: Youth Risk Behavior Survey, 2001. Centers for Disease Control and Prevention; Department of Elementary and Secondary Education. *Tobacco Use Among Missouri Middle School Students, Jefferson City, MO.*, Missouri Department of Health, 1999.

Prevention is Key

Improving the overall health of Missourians cannot be accomplished without dramatic reductions in the rate of tobacco use among adults and teenagers.

This report is a resource and a guide to key policies needed to reduce the serious burden of disease, disability and death in Missouri. Evidence compiled from other states shows a comprehensive tobacco use prevention and control program produces substantial reductions in tobacco use. The Master Settlement Agreement provides an unprecedented opportunity in Missouri to alleviate some of the burden and deaths due to tobacco use. We must invest this money wisely to reduce premature loss of life and health. Other states have proven that a statewide coordinated effort will reduce tobacco use and offset related costs with a healthier, more productive future for all Missourians.

The framework for Missouri's comprehensive tobacco use prevention plan is based on the *Best Practices for Comprehensive Tobacco Control Programs* issued in August 1999 by the U.S. Centers for Disease Control and Prevention (CDC).[13] This plan advocates tobacco use prevention and control programs that are comprehensive, sustainable over time and accountable.

Goals of the Comprehensive Tobacco Use Prevention Program

- substantially reduce the number of young people who will become addicted to tobacco;
- increase the success rate of young people and adults trying to quit using tobacco;
- eliminate the exposure of nonsmokers to environmental or "secondhand" smoke; and,
- reduce the disparities related to tobacco use and its health effects among different population groups.

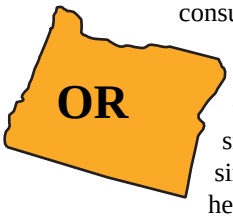
News Flash: *Comprehensive Tobacco Use Prevention Programs Work*

Comprehensive tobacco control programs significantly reduce smoking, which in turn significantly reduces morbidity, mortality, and health care costs. The foundation for comprehensive tobacco use prevention is based on the understanding that behavior change requires not only education but also awareness, advocacy, changes in organizations, policy development and enforcement, economic supports, environmental changes and multi-method strategies. This approach to public health shows that individual elements are most effective when integrated into a comprehensive program.

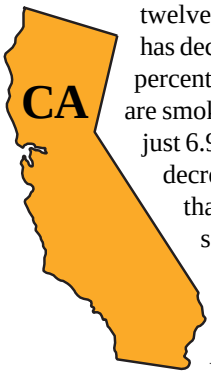
States such as California, Oregon and Massachusetts have all implemented comprehensive tobacco use prevention programs along with increases in their excise taxes.

Current Per-pack ExciseTaxes:

California	*87¢*
Massachusetts	*76¢*
Oregon	*68¢*
Missouri	*17¢*



Between 1996 and 1998 total cigarette consumption in Oregon declined 11.3% or ten packs per person and the smoking rate fell 6.4%.[14] Overall, the adult smoking rate decreased 21% since initiation of its comprehensive tobacco prevention program. Between spring 1999 and spring 2000, smoking rates among middle students have decreased by 22% among 8th graders and 21% by 11th graders.



Between 1992 and 1996, total cigarette consumption in California declined 16%.[15] Over a twelve-year period, the percent of smokers has declined from 26.7 percent (1988) to 18.7 percent (1999) and almost all public places are smoke-free. Youth smoking declined to just 6.9 percent in 1999, a 43 percent decrease since 1995. California estimates that it has saved $390 million in the first seven years by reducing heart attacks and strokes related to smoking and an additional $100 million by reducing the number of pregnant women who smoke. Overall, California estimates indicate that for each dollar spent on reducing smoking it saves $8.

Total cigarette consumption in Massachusetts declined 20% during 1992 and 1996.[15] The percent of smokers dropped from 22% (1993) to 18% (2000). In addition, 70% of public places are smoke-free with no reported impact on restaurant business. Direct health care costs have been reduced by $85 million each year.

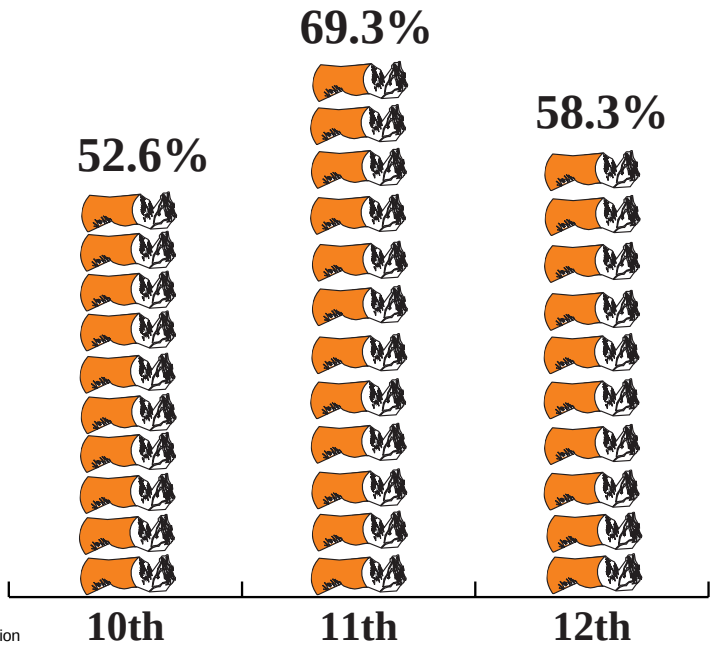


Figure 5—2001 Missouri High School Student Current Smokers Who Have Tried to Quit During the Past 12 Months

The numbers are encouraging. Obviously Missouri kids know they should not smoke. But kids are impressionable. Which do they receive more of, support for attempting to quit, or inducement to go ahead and light up?

Source: Youth Risk Behavior Survey, 2001.
Centers for Disease Control and Prevention;
Missouri Department of Elementary and Secondary Education

Conclusion

Many Missouri adults and youth continue to smoke. As the illustrations in this publication demonstrate, the problem affects us all. Clearly we are faced with urgent health issues and startling trends related to tobacco use that must be addressed. Tobacco use in Missouri is a serious, and growing, burden for individuals, for our health care system and for our society. Doing less to prevent the use of tobacco is just not a viable option. Plans similar to Missouri's comprehensive tobacco use prevention program already save lives in other states. We can't afford to do less in Missouri.

Figure 6—Missouri Adult Smoking Prevalence by Gender, 1985-2000

Source: Behavioral Risk Factor Surveillance System, 1985-2000. Centers for Disease Prevention and Control.

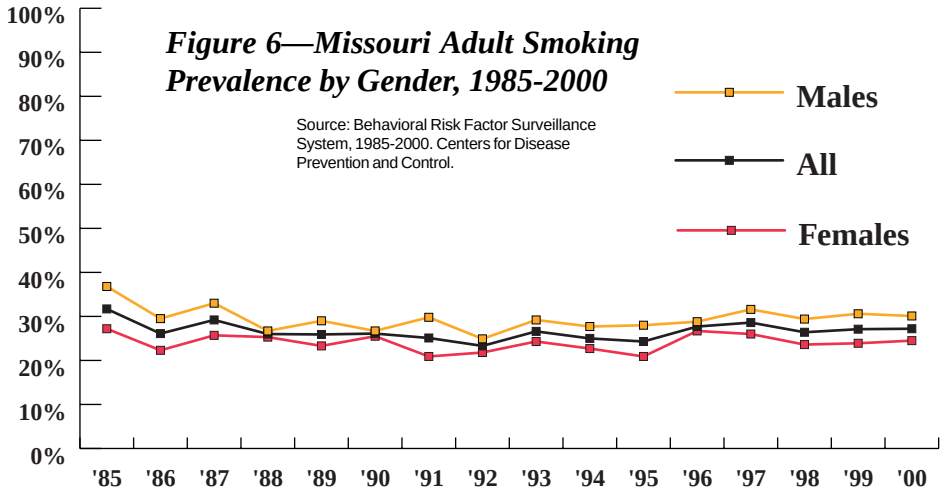
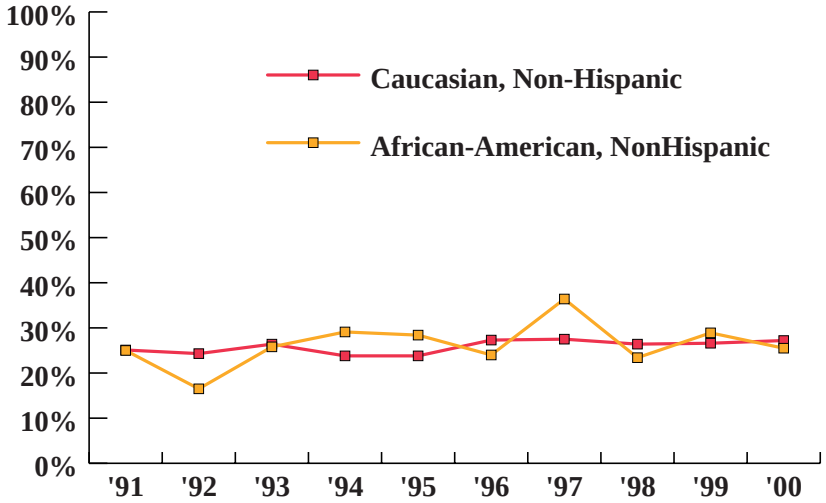


Figure 7—Missouri Adult Smoking Prevalence by Race/Ethnicity, 1991-2000

Source: Behavioral Risk Factor Surveillance System, 1991-2000. Centers for Disease Prevention and Control.



References

1. Miller, N., Simoes, E.J., & Chang, J. (1997). Smoking-attributable mortality in Missouri, 1995. Missouri Medicine, 11, 661-665.
2. Centers for Disease Control and Prevention (CDC). (2001). Investment in tobacco control: State highlights-2001. Atlanta, GA: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health.
3. Miller, L, et al., (1998). State estimates of total medical expenditures attributable to cigarette smoking, 1993. Public Health Reports, 113, 447-458.
4. Campaign for Tobacco-free Kids. (2002). The toll of tobacco in Missouri. [On-line]. Available: http://www.tobaccofreekids.org/
5. Missouri Department of Health and Senior Services (MDHSS). (2000). Twelve leading causes of death by race with percentages and with rates per 100,000 for all races, resident data: Missouri 2000. [On-line]. Available: http://www.dhss.state.mo.us.
6. Prabhat, J., & Chaloupka, F.J. (1999). Curbing the epidemic: Governments and the economics of tobacco control. Development in Practice, 363 (Series ISBN 0-8213-4519-2; HV5732.J43).
7. Action on Smoking and Health, Special Report, Involuntary Smoking: The Factual Basis for Action, 1993.
8. Slotkin, T.A. (1998). Fetal nicotine or cocaine exposure: which is worse? Journal of Pharmacology and Experimental Therapeutics, 285, 931-945.
9. MDHSS. (2002). Missouri Information for Community Assessment (MICA). [On-line]. Available: http://www.dhss.state.mo.us
10. Coffield, A.B., Maciosek, M.V., McGinnis, M., Harris, J.R., Caldwell, M.B., & Teutsch, S.M. (2001). Priorities among recommended clinical preventive services. American Journal of Preventive Medicine, 21(1), 1-9.
11. Centers for Disease Control and Prevention. (1999, 2000). Behavioral risk factor surveillance system summary results. Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch.
12. Morbidity and Mortality Weekly Report (MMWR). (31 July 1998). Response to increases in cigarette prices by race / ethnicity, income, and age groups—United States 1976-1993. MMWR, 47(29), 605-609.
13. Centers for Disease Control and Prevention. (August 1999). Best practices for comprehensive tobacco control programs. Atlanta, GA: U.S. Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
14. MMWR. (26 February 1999). Oregon—Reducing cigarette consumption through a comprehensive tobacco control program. MMWR, 48(7), 140-143.
15. MMWR. (8 November 1996). Cigarette smoking before and after an excise tax increase and an anti-smoking campaign—Massachusetts, 1990-1996. MMWR, 45 (44), 966-970.